

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Class: \_\_\_\_\_

### Project Macromolecules:

There are several ideas for projects listed on the bottom of this paper. You are to choose any ONE idea and complete them in 1 week from receiving the assignment. This is a lab grade, and will count 100 points. ALL PROJECTS MUST INCLUDE VOCABULARY WORKS LISTED ON THE BIOLOGY CONCEPTS.

Create a 3D structure of the four different types of macromolecules. The structure doesn't have to induce the individual atoms of the molecule, but just the major monomer connected to each other. You can use repeating blocks or "small" items to build your macromolecule. The macromolecule must be labeled (with individual parts such as phosphate – nitrogenous base – ribose) Functions of the macromolecules must be included	Create a song, rap, or poem about the macromolecule. You must have at least 3 verses and a beat. Make sure you have included the function of each in your song.	Create a children's book about the macromolecule in your body. Make sure you include illustrations, definitions, and functions. It should be easy enough to be understood by an elementary age student.  NEEDS TO BE VERY COLORFUL!
Create a video describing the 4 macromolecules regarding the structure and function. You MUST be in the video, and it cannot be based on a power point presentation. You must turn in a digital copy as well.	Write a letter (about 2 pages typed or about 4 hand written) as if you are a nutritionist writing a letter to a patient about living a healthier lifestyle. Include the macromolecules that your patient will need in his/her diet, and why they are important.	Create a comic for the macromolecules. This comic should explain in detail each molecule and include pictures as examples for each one and the pictures of the structure. Function of each molecule must be included. The different macromolecules could be the characters in your comic book.

Biology Vocabulary:

Macromolecule	monomer	polymer	carbohydrate	monosaccharide		
Polysaccharide	protein	peptide bond	amino acid	lipid		
fatty acid	nucleic acid	nucleotide	ribose	DNA	RNA	glucose

Rubric:

	0	5	10	15	18	20
Analogy, Creativity, and overall design	Not completed	Minimal effort	Design is still lacking the minimal requirements	An average design. Minimum requirements met	Exceeding the minimal requirements demonstrated good design.	Demonstrated very creative and original design
	0	20	20	30	40	50
Structure and Function of your macromolecules	Not completed	Minimal understanding	Lack of function and structural understanding	Structures and function are present but with error	Most structures and function are correct	All are correct
Use of vocabulary	0	7	15	21	27	30
	Less than 4 vocabulary words were used.	5-9 words were used.	10-13 words were used	13-14 of the required words were used correctly	15-16 words were used correctly	All 17 words were used and demonstrated understanding.